REMARKS

Please reconsider the application in view of the above amendments and the following remarks. Applicant thanks the Examiner for carefully considering this application.

Disposition of the Claims

Claims 1-71 are pending. Claims 26-52 have been withdrawn. Therefore, claims 1-25 and 53-71 are under consideration. Claims 1, 2, 10, 14, 53, and 57 are independent. The remaining claims depend, directly or indirectly, from these independent claims.

Amendments to the Claims

Claims 1, 2, 10, 11, 14, 53, 54, 57, and 58 have been amended to remove non-elected species and to clarify the invention. No new matter is introduced by these amendments.

Claim Rejections under 35 U.S.C. § 112

Claims 1-25 and 53-71

Claims 1-25 and 53-71 are rejected under 35 U.S.C. 112, first paragraph, for lack of enablement as related to prodrug. Claims 1, 2, 10, 14, 53, and 57 have been amended to remove "prodrug." Accordingly, withdrawal of this rejection is respectfully requested.

Claims 1-25 and 53-71

Claims 1-25 and 53-71 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for the inclusion of compound and composition in the same claim and for having multiple

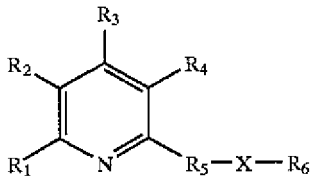
rings as variables of R^2. Claims 1, 2, 10, 14, 53, and 57 have been amended by deletion of "a pharmaceutical composition thereof" and "or R^2 is a multi-ring structure having 2 to 4 rings wherein the rings are independently selected from the group consisting of cycloalkyl, heterocyclyl, aryl and heteroaryl, where some or all of the rings may be fused to each other." Accordingly, withdrawal of this rejection is respectfully requested.

Claim Rejections under 35 U.S.C. § 103(a)

Claims 10, 13, 14, 25, 53, and 56

Claims 10, 13, 14, 25, 53, and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (U.S. Patent No. 6677452) (hereinafter "Chen"). This rejection is respectfully traversed.

Embodiments of the invention relate to compounds having a core comprising a piperazine bonded to the 3-position of a pyridine ring, as shown in independent claims 10, 14, and 53.

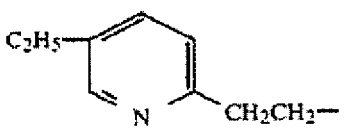


In contrast, Chen discloses pyridine carboxamide or sulfonamide derivatives having a general structure shown above, wherein one of R_1, R_2, R_3, or R_4 comprises a carboxamide or sulfonamide group (Col. 3, lines 1-2). When R_5 is piperazine, the compounds look like compounds of the invention (Example 1, columns 32 and 33). However, the piperazine is bonded to the 2-

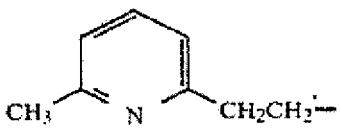
position of the pyridine ring in Chen's compounds, whereas compounds of the invention has a piperazine attached to the 3-position of the pyridine ring. Therefore, Chen's compounds are structurally distinct from compounds of the present invention.

In *Takeda Chemical Industries, Ltd. v. Alphapharm Pty., Ltd.* (Fed. Cir. 2006-1329; June 28, 2007), Federal Circuit held: "[a] known compound may suggest its homolog, analog, or isomer because such compounds 'often have similar properties and therefore chemists of ordinary skill would ordinarily contemplate making them to try to obtain compounds with improved properties.' We clarified, however, that in order to find a prima facie case of unpatentability in such instances, a showing that the 'prior art would have suggested making the specific molecular modifications necessary to achieve the claimed invention' was also required. Id. (citing *In re Jones*, 958 F.2d 347 (Fed. Cir. 1992); *Dillon*, 919 F.2d 688; *Grabiak*, 769 F.2d 729; *In re Lalu*, 747 F.2d 703 (Fed. Cir. 1984))." (Emphasis added).

In the *Takeda* case, the Court held that Takeda's compound (structure shown below; left), which has an ethyl group attached to the 5-position of the pyridine ring, is not rendered obvious by a prior art compound having a methyl attached to the 6-position of the pyridine ring (shown below; right) because the prior art does not suggest the particular modification necessary to achieve the claimed compound.



Takeda's compound



Prior art

The compounds of the present invention and the compounds in Chen are positional isomers, similar to the situations in the *Takeda* case. As in the *Takeda* case, Chen does not teach or suggest the particular modification necessary to achieve the compounds of the present invention. Therefore, Chen cannot render claims of the present invention obvious.

Furthermore, Chen discloses the compounds as a combinatorial library for screening therapeutically useful compounds (Col. 2, lines 39-42). Chen does not teach or suggest any of these compounds can be used to inhibit SCD. Therefore, even if one assumes, *arguendo*, that the compounds of the invention and compounds of Chen are simple positional isomers, compounds of the invention do have new and unexpected utilities, and, therefore, compounds of the invention would not be obvious over Chen. *In re Norris* 179 F.2d 970 (C.C.P.A. 1950).

For reasons set forth above, Chen cannot render these claims obvious. As a result, claims 10, 14, and 53 are patentable over Chen. The dependent claims 13, 25, and 56 should also be patentable for at least the same reasons. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 1-25, 53-58, 61, 70, and 71

Claims 1-25, 53-58, 61, 70, and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fu et al. (US20050119251) (hereinafter "Fu"). This rejection is respectfully traversed.

Fu qualifies as a 102(e) reference because it was published on June 2, 2005, which is after the priority date of the present application.

35 U.S.C. 103(c)(1) states "Subject matter developed by another person, which qualifies as prior art only under one or more of subsections (e), (f), and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person."

The present application (10/566,857) and Fu et al. (US20050119251) were, at the time of invention of the present application was made, owned by Xenon, as evidenced by the attached copy of assignment recordation (Reel No. 018221, Frame Nos. 0236, 0222, and 0242). Therefore, under 35 U.S.C. § 103(c), Fu cannot be used to render the claims of the present invention obvious. Accordingly, withdrawal of this rejection is respectfully requested.

Double Patenting

Claim 71

Claim 71 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 57.

Claim 57 has been amended by deletion of "a pharmaceutical composition thereof." Therefore, claim 71 is not a substantial duplicate of claim 57. Accordingly, withdrawal of this objection is respectfully requested.

Claim 24

Claim 24 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 1.

Claim 1 has been amended by deletion of "a pharmaceutical composition thereof." Therefore, claim 24 is not a substantial duplicate of claim 1. Accordingly, withdrawal of this objection is respectfully requested.

Claim 56

Claim 56 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 53.

Claim 53 has been amended by deletion of "a pharmaceutical composition thereof." Therefore, claim 56 is not a substantial duplicate of claim 53. Accordingly, withdrawal of this objection is respectfully requested.

Claims 1-8

Claims 1-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 of copending Application No. 11/815739.

A terminal disclaimer is filed herewith. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 1-10, 12-15, 18, 19, and 23

Claims 1-10, 12-15, 18, 19, and 23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10, 16-20, 22, 25, and 28 of copending Application No. 10/566193 (US PGPUB 20060199802).

A terminal disclaimer is filed herewith. Accordingly, withdrawal of this rejection is respectfully requested.

Conclusion

Applicant believes this reply is fully responsive to all outstanding issues and places this application in condition for allowance. If this belief is incorrect, or other issues arise, the Examiner is encouraged to contact the undersigned or his associates at the telephone number listed below. Please apply any charges not covered, or any credits, to Deposit Account 50-0591, Reference 17243/002001.

Dated: November 17, 2008

Respectfully submitted,

By _____

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Attachments: Copy of Assignment recordation
2 Terminal Disclaimers

Assignments on the Web > Patent Query

Patent Assignment Abstract of Title

NOTE:Results display only for issued patents and published applications. For pending or abandoned applications please consult USPTO staff.

Total Assignments: 3

Patent #: NONE **Issue Dt:** **Application #:** 10885901 **Filing Dt:** 07/06/2004

Publication #: 20050119251 **Pub Dt:** 06/02/2005

Inventors: Jianmin Fu, Vishnumurthy Kodumuru, Shaoyi Sun, Michael D. Winther, Richard M. Fine et al

Title: Nicotinamide derivatives and their use as therapeutic agents

Assignment: 1

Reel/Frame: 018221/0236 **Recorded:** 09/08/2006 **Pages:** 3

Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

Assignor: DISCOVERY PARTNERS INTERNATIONAL, INC. **Exec Dt:** 12/20/2004

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Assignment: 2

Reel/Frame: 018221/0222 **Recorded:** 09/08/2006 **Pages:** 7

Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

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HARVEY, DANIEL F. **Exec Dt:** 12/20/2004
LI, WENBAO **Exec Dt:** 12/20/2004
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Assignment: 3

Reel/Frame: 018221/0242 **Recorded:** 09/08/2006 **Pages:** 10

Conveyance: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

Assignors: FU, JIANMIN **Exec Dt:** 08/23/2006
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Web interface last modified: October 18, 2008 v.2.0.2